



ADDENDUM 2

project Lake Superior Zoo Black Bear Exhibit
project # 019001.00
date July 31, 2019
from Tiersa Wodash, DSGW Architects
to All planholders for above project

The following addendum shall become part of the construction documents for the construction of the above referenced project.
This addendum supersedes and supplements all previous reference to similar items.

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am duly a Licensed Architect under the laws of the State of Minnesota.

Signature

Registration #

21068

Date

July 31, 2019

general clarifications 1. Structural framing assemblies for exterior viewing windows to CHANGE from stainless steel to hot dipped galvanized steel.

<i>specifications</i>	SECTION	DESCRIPTION
	00 01 10	PROJECT MANUAL INDEX
		1. OMIT this section as originally issued & revised in Addendum 1 and REPLACE with Section 00 01 10 – Project Manual Index – Revised, as included with this addendum.

drawings **SHEET DESCRIPTION**
Following is a summary of the changes to drawing sheets that are being reissued with this addendum.

Eo.1 COVER SHEET – ELECTRICAL
1. Circuiting revised in panel schedules due to plumbing equipment revisions.

E2.1 FIRST FLOOR PLAN – POWER
1. Removed connections to heat trace.
2. Removed connection to recirculating pump.
3. Relocated connection to gas water heater.

Po.1 COVER SHEET AND SPECIFICATION - PLUMBING
1. Spec. Section 22116 – revised.

P1.1 FLOOR PLANS – PLUMBING
1. Revised keynotes 2, 3, 4, 5 & 8.
2. Rerouted CW main to underground entry to semi-heated space.
3. Relocated water heater and expansion tank.
4. Eliminated circulating pump and HW recirculation piping.

5. Rerouted CW and HW piping.
6. Eliminated heat trace table.
7. Added note for waterfall supply piping.

P5.1 PLUMBING SCHEDULES

1. Eliminated circulating pump schedule.
2. Revised Gas-Fired Water Heater Schedule.

- Enclosures*
- Spec. Section 00 01 10 – Project Manual Index - Revised (2 pages)
 - Windsor MEP Drawings Eo.1, E2.1, Po.1, P1.1 & P5.1 (24x36)(5 pages)
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This addendum shall become part of this bid. The bidder shall insert the addendum number in the space where indicated on the proposal form. Failure to comply may result in the bid being rejected.

END OF ADDENDUM TWO (2)

SECTION 00 01 10

PROJECT MANUAL INDEX

LAKE SUPERIOR ZOO – BLACK BEAR EXHIBIT RENOVATION DULUTH, MINNESOTA

DIVISION 00 PROCUREMENT AND CONTRACTING REQUIREMENTS

00 01 01	PROJECT MANUAL TITLE AND REGISTRATION SHEET
00 01 10	PROJECT MANUAL INDEX
00 01 15	SCHEDULE OF DRAWINGS
00 11 10	ADVERTISEMENT FOR BIDS (CITY OF DULUTH)
00 21 00	INSTRUCTIONS TO BIDDERS
00 41 10	BID FORM ONLINE (CITY OF DULUTH – BID EXPRESS)
00 51 10	LIST OF CONTRACT FORMS (BID EXPRESS)
00 52 00	CONTRACT AGREEMENT FORM - AIA Document A132/CMa Standard Form of Agreement Between Owner and Contractor
00 72 00	GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION (AIA A232/CMa - 2009 – as modified for this project)
00 72 10	SUPPLEMENTAL GENERAL CONDITIONS

DIVISION 01 GENERAL REQUIREMENTS

01 10 00	SUMMARY OF WORK
01 12 00	LIST OF WORK SCOPE CATEGORIES & WORK SCOPE INDEX
01 12 10	WORK SCOPE - GENERAL REQUIREMENTS FOR ALL CONTRACTS
01 12 20 2-A	WORK SCOPE FOR 2-A - DEMOLITION PACKAGE
01 12 20 3-A	WORK SCOPE FOR 3-A - CONCRETE PACKAGE
01 12 20 3-B	WORK SCOPE FOR 3 B - CONCRETE RESTORATION
01 12 20 4-A	WORK SCOPE FOR 4-A - MASONRY PACKAGE
01 12 20 5-A	WORK SCOPE FOR 5-A - STRUCTURAL STEEL & MISC. METALS – COMBINED MATERIAL & ERECTION
01 12 20 6-A	WORK SCOPE FOR 6-A - CARPENTRY PACKAGE
01 12 20 7-K	WORK SCOPE FOR 7-K – JOINT SEALER PACKAGE
01 12 20 8-A	WORK SCOPE FOR 8-A - DOORS, FRAMES AND HARDWARE - MATERIAL ONLY
01 12 20 9-K	WORK SCOPE FOR 9-K – PAINTING AND COATINGS
01 12 20 13-A	WORK SCOPE FOR 13-A – ARTIFICIAL ROCKWORK
01 12 20 23-B	WORK SCOPE FOR 23-B – COMBINED MECHANICAL
01 12 20 26-A	WORK SCOPE FOR 26-A – COMBINED ELECTRICAL PACKAGE
01 12 20 31-A	WORK SCOPE FOR 31-A – EARTHWORK, EXTERIOR IMPROVEMENTS, & UTILITIES
01 29 00	PAYMENT PROCEDURES
01 31 00	PROJECT MANAGEMENT AND COORDINATION
01 32 10	PROJECT SCHEDULE REQUIREMENTS
01 32 20	EXISTING PROJECT INFORMATION
01 32 53	PROJECT SAFETY REQUIREMENTS
01 33 00	SUBMITTAL PROCEDURES
01 44 00	QUALITY ASSURANCE PROCEDURES
01 50 10	TEMPORARY FACILITIES AND CONTROLS
01 60 00	PRODUCT REQUIREMENTS
01 77 10	CLOSE-OUT PROCEDURES
01 78 00	CLOSE-OUT SUBMITTALS

DIVISION 02 EXISTING CONDITIONS

02 41 00	DEMOLITION
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DIVISION 03 CONCRETE

03 10 00	CONCRETE FORMING AND ACCESSORIES
03 20 00	CONCRETE REINFORCEMENT
03 30 00	CAST-IN-PLACE CONCRETE

DIVISION 04 MASONRY

04 20 00 UNIT MASONRY

DIVISION 05 METALS

05 12 00 STRUCTURAL STEEL FRAMING

05 50 00 METAL FABRICATIONS

DIVISION 07 THERMAL AND MOISTURE PROTECTION

07 21 00 THERMAL INSULATION

07 21 19 FOAMED IN PLACE INSULATION – POLYICYNENE

07 42 13 METAL WALL PANELS

07 62 00 SHEET METAL FLASHING AND TRIM

07 90 05 JOINT SEALERS

DIVISION 08 OPENINGS

08 11 13 HOLLOW METAL DOORS AND FRAMES

08 71 00 DOOR HARDWARE

08 80 00 GLAZING

----- BLACK BEAR EXHIBIT GLAZING GLASS ENGINEERING ANALYSIS

DIVISION 09 FINISHES

09 22 16 NON-STRUCTURAL METAL FRAMING

09 90 00 PAINTING AND COATINGS

DIVISION 13 SPECIAL CONSTRUCTION

13 15 00 WATER FEATURE

DIVISION 31 EARTHWORK

31 22 00 GRADING

31 23 16 EXCAVATION

31 23 23 FILL

DIVISION 32 EXTERIOR IMPROVEMENTS

32 11 23 AGGREGATE BASE COURSES

32 12 16 ASPHALT PAVING

32 16 00 CONCRETE CURBS AND WALKS

32 31 13 CHAIN LINK FENCES AND GATES

32 92 19 SEEDING

32 92 23 SODDING

DIVISION 33 UTILITIES

33 41 11 SITE STORM UTILITY DRAINAGE PIPING

33 46 00 SUBDRAINAGE

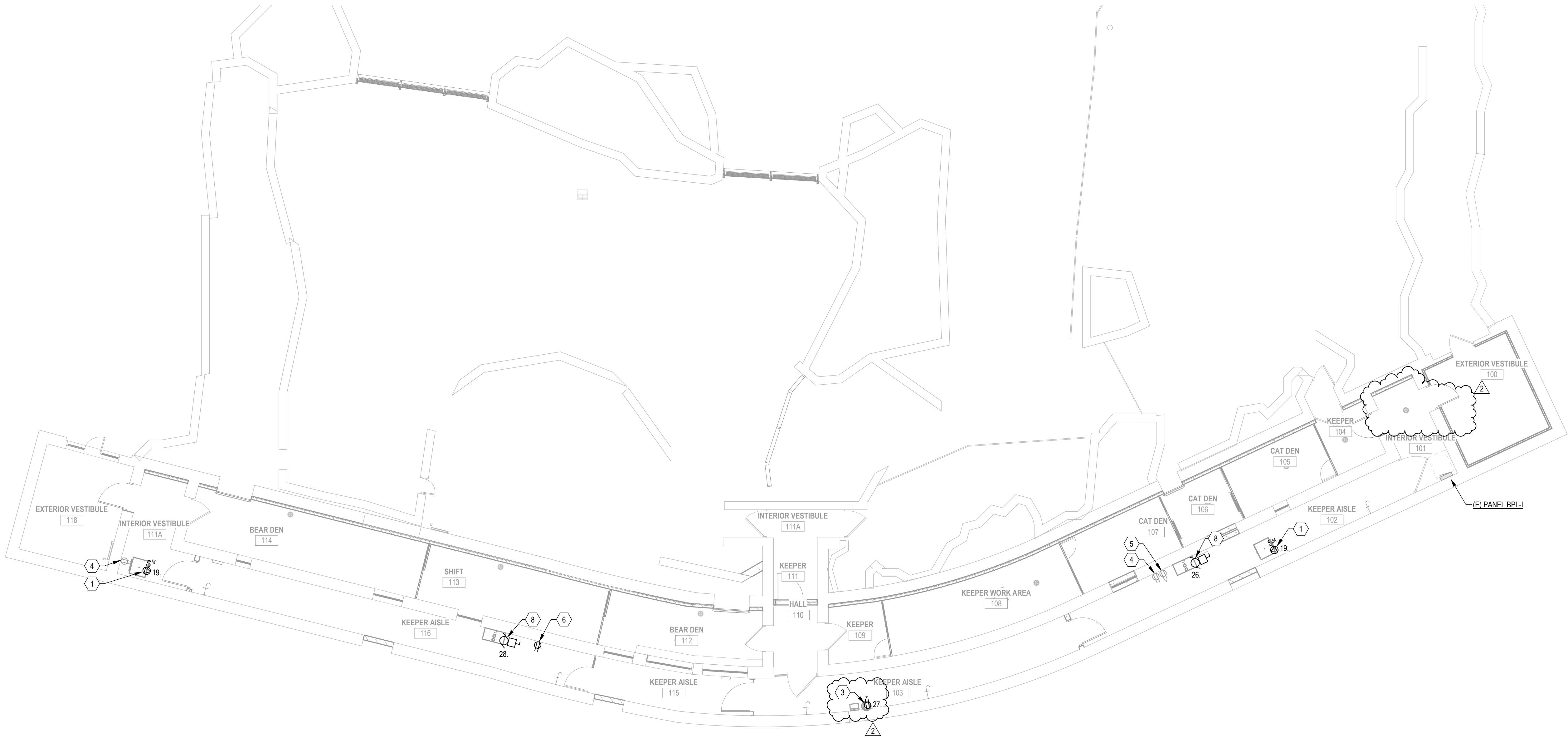
END OF SECTION

E0.1	COVER SHEET - ELECTRICAL
E1.1	DEMOLITION FLOOR PLAN - ELECTRICAL
E2.1	FIRST FLOOR PLAN - POWER
E3.1	FIRST FLOOR RCP - LIGHTING
E4.1	SPECIFICATIONS - ELECTRICAL

LUMINAIRE SCHEDULE NOTES
1. PROVIDE WITH JUNCTION BOX MOUNTING ADAPTER KIT.

- A. FIELD VERIFY ALL CONDITIONS THAT MAY AFFECT CONSTRUCTION.
- B. GRAY LINES INDICATE EXISTING TO REMAIN, BOLD LINES INDICATE NEW WORK.
- C. MECHANICAL AND PLUMBING EQUIPMENT SHOWN FOR REFERENCE ONLY. REFER TO DIVISIONS 22 AND 23 FOR ALL REQUIRED INFORMATION.
- D. ALL CIRCUT NUMBERS THIS SHEET REFER TO (E) PANEL BPL-U.N.O.

2	1	GAS UNIT HEATER, 120V, 24FLA, PROVIDE 3/4", 3#10 CU
	2	NOT USED
	3	GAS FIRED WATER HEATER, 120V, 5.0A.
	4	(E) DUPLEX RECEPTACLE TO REMAIN.
	5	(E) GFCI DUPLEX RECEPTACLE TO REMAIN.
	6	PROVIDE (N) DUPLEX RECEPTACLE. CONNECT TO NEAREST (E) RECEPTACLE CIRCUIT.
2	7	NOT USED
	8	PROVIDE CONNECTION TO ENERGY RECOVERY UNIT, 120V, 4.8 MCA.



1 FIRST FLOOR PLAN - POWER
SCALE: 1/8" = 1'-0"

project #: 19004
date: 7/31/2019 12:42:18 PM
drawn by: SEW
checked by: TJH

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the state of Minnesota.

Signature: Thy Hendrickson
 Typed or Printed Name: Thayer Hendrickson
 Date: 07/31/2019
 License Number: 57042

[illegible]

Sheet title: FIRST FLOOR
PLAN - POWER

sheet
number:

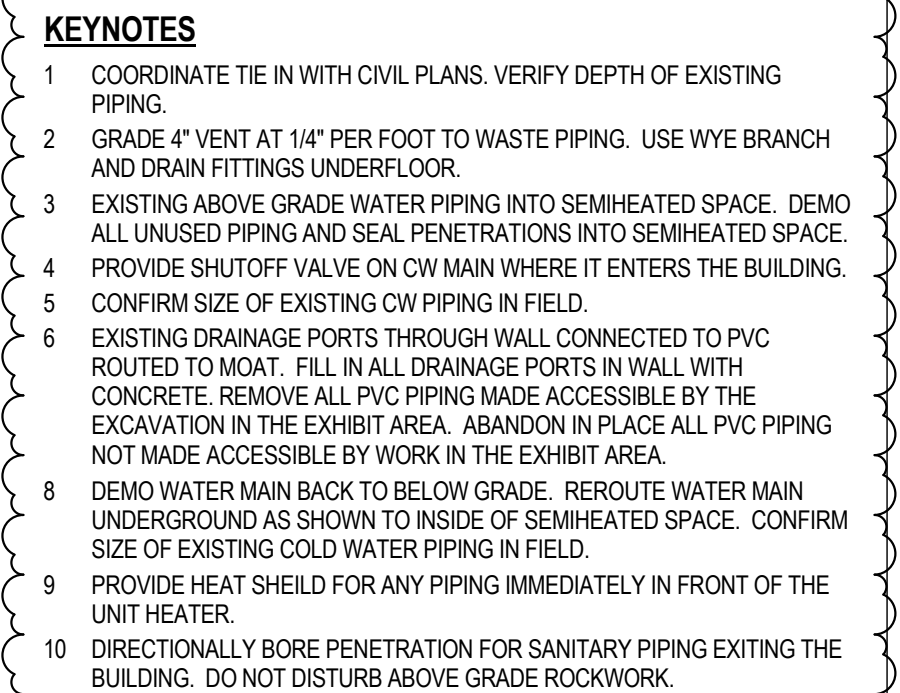
E2.1

7210 Fremont Street
Duluth MN, 55807

checked by: JAH

Signature: Jade Homola
 Typed or Printed Name: Jade Homola
 Date: 07/31/2019
 License Number: 54997

P1.1



1 UNDERFLOOR PLUMBING PLAN
SCALE: 1/8" = 1'-0"



2 LEVEL 1 PLUMBING PLAN
SCALE: 1/8" = 1'-0"



WINDSOR
MEP ENGINEERS
Duluth, MN | Vancouver, WA
www.windsorengineers.com
Project No: 19004

Lake Superior Zoo - Black Bear Exhibit

7210 Fremont Street
Duluth MN. 55807

project #: 19004

date: 7/31/2019 12:42:33 PM

drawn by: ZJK

checked by: JAH

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the state of Minnesota.

Signature: Jude Homola
Typed or Printed Name: Jude Homola
Date: 07/31/2019
License Number: 54997

[illegible]

PLUMBING SCHEDULES

sheet title

sheet
number

P5.1

GAS-FIRED WATER HEATER SCHEDULE

ID	LOCATION		MANUFACTURER	MODEL NO.	TYPE	GAS-FIRED HEAT EXCHANGER		UNIT WEIGHT	VOLT	PH	REMARKS	
	NAME	NO.				GAS BURNER	WATERSIDE					
												INPUT
WH-01	KEEPER AISLE	103	AO SMITH	ATH-110C-N	WALL MOUNT - TANKLESS	140,000 BTUH	81%	100 DEG. F.	55 lb	120 V	1	PROVIDE ASSE 1017 COMPLIANT MIXING VALVE; POWERS SERIES LFSH OR EQUAL. PROVIDE CONCENTRIC VENT KIT AND INSTALL PER MANUFACTURER'S RECOMMENDATION. PENETRATE THROUGH ROOF OF KEEPER AISLE DIRECTLY ABOVE WH.

DOMESTIC FIXTURE SCHEDULE

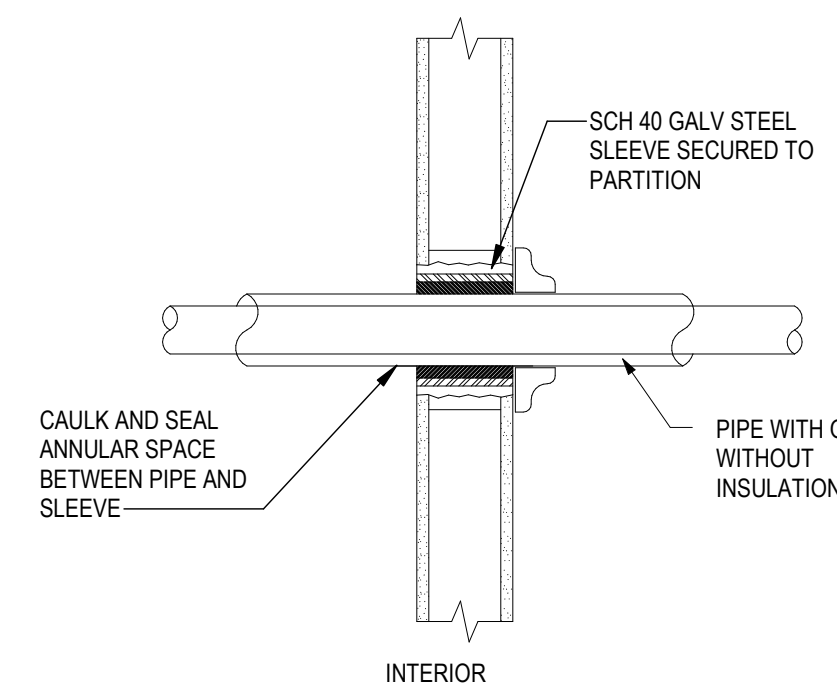
ID	DESCRIPTION	MANUFACTURER	MODEL	MATERIAL DESCRIPTION	FINISH	FLOW FIXTURE				PIPE SIZE		SPECIFICATION
						MAX PRESS	COLD WATER TEMP.	HOT WATER TEMP.	MAX. MIXED WATER TEMP.	COLD WATER	HOT WATER	
HB-1	HOSE BIBB	WOODFORD	22	BRASS	ROUGH	125.0	40 °F	120 °F	120 °F	3/4	3/4	INTERIOR HOSE BIBB WITH VACUUM BREAKER, 3/4" HOSE THREAD OUTLET, LOCK SHIELD CAP, AND REMOVABLE "TEE" HANDLE. PROVIDE SHUTOFF VALVE IN HOT AND COLD WATER SUPPLY AHEAD OF HOSE BIBB.
Grand total: 5												

FLOOR DRAIN SCHEDULE

ID	DESCRIPTION	MANUFACTURER	MODEL	QTY	MATERIAL DESCRIPTION		PRIMER CONNECTION	WASTE PIPE SIZE	VENT PIPE SIZE	PRIMER PIPE SIZE	SPECIFICATION
					DRAIN BODY	STRAINER					
FD-2	AREA DRAIN	WATTS	FD-320-SET	3	EPOXY COATED CAST IRON	DUCTILE IRON	No	4"	2"	---	AREA DRAIN WITH ANCHOR FLANGE, MEMBRANE CLAMP WITH WEEPHOLES, 8" DIAMETER ADJUSTABLE TOP, AND NO HUB CONNECTION

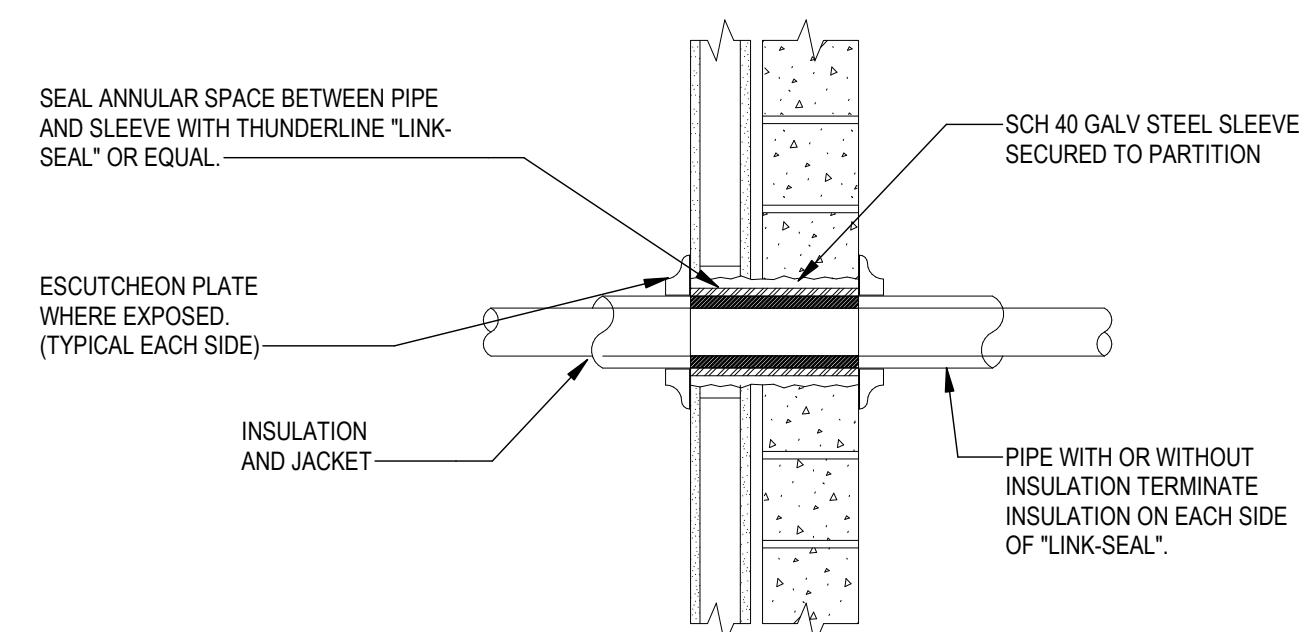
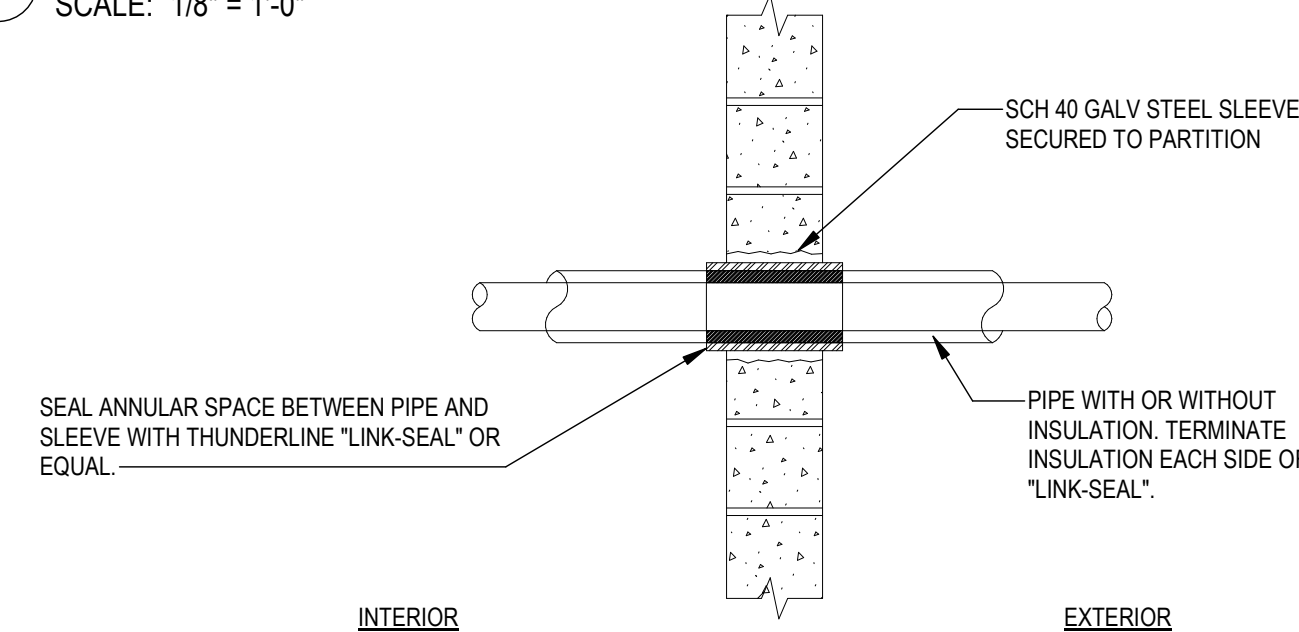
EXPANSION TANK SCHEDULE

ID	MANUFACTURER	MODEL NO.	TANK			UNIT DIMENSIONS		UNIT WEIGHT	REMARKS
			VOLUME	ACCEPTANCE VOL.	PRESSURE RELIEF	HEIGHT	DIAMETER		
ET-1	AMTRON	ST-12	4.4 gal	3.2 gal	150.0 psi	1' - 3"	0' - 11"	9 lb	



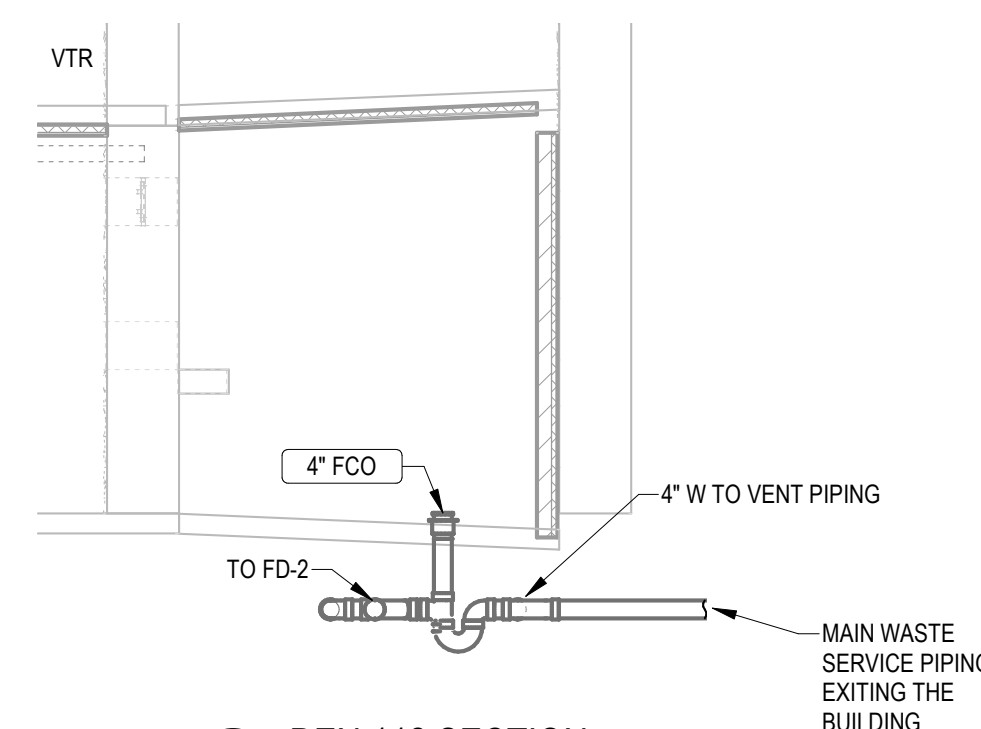
- NOTES:**
1. TYPICAL FOR NON-INSULATED PIPE AND CONDUIT.
 2. ALL CAULKING AND SEALANT SHALL BE FIRE RATED (SEE SPECIFICATIONS).
 3. WHERE PIPING IS EXPOSED AT FINISHED WALL, FLUSH MOUNT SLEEVE AND PROVIDE AN ESCUTCHEON PLATE.

4 PIPE PENETRATION THRU INTERIOR WALLS
SCALE: 1/8" = 1'-0"

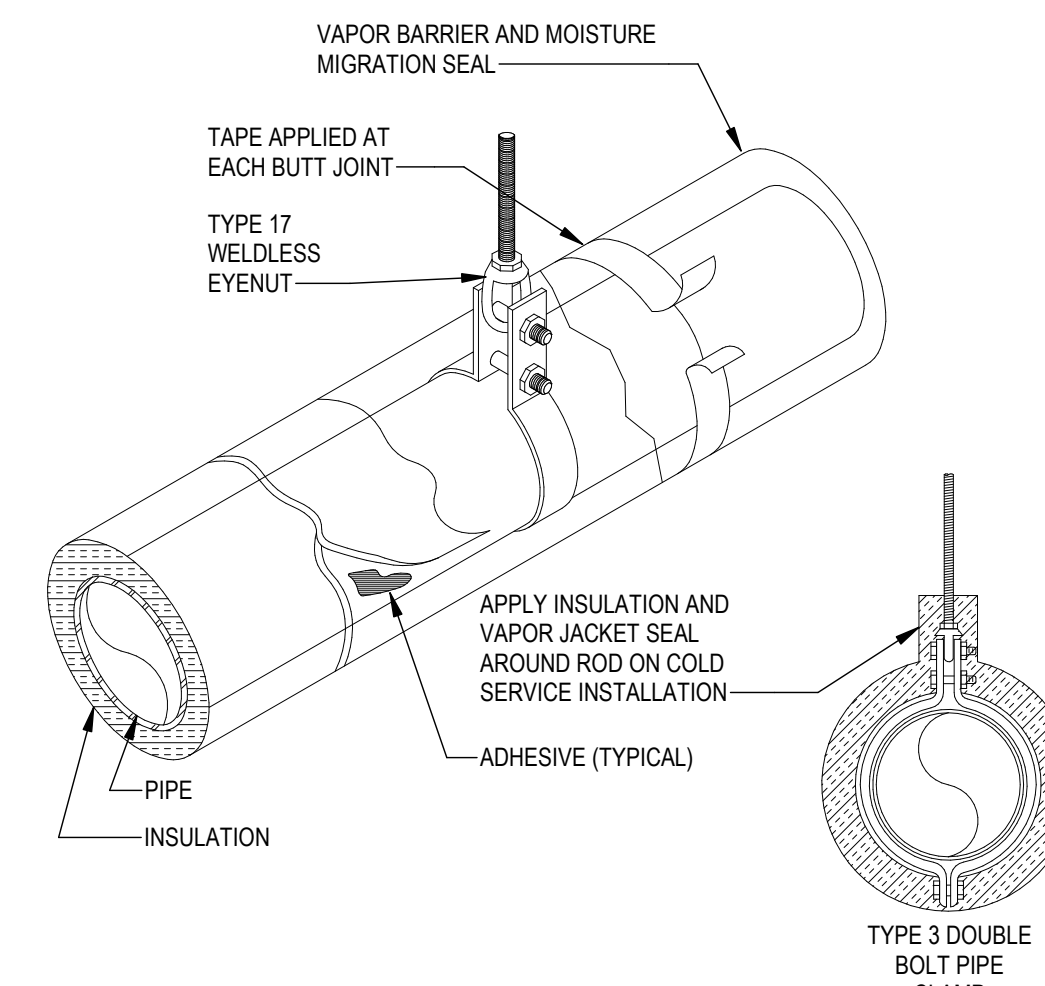


- NOTES:
1. TYPICAL FOR NON-INSULATED PIPING AND CONDUIT.
 2. TYPICAL FOR MASONRY OR CONCRETE WALL.
 3. FOR WALL PENETRATION WITH FIRE RATINGS GREATER THAN (1) HOUR, USE THUNDERLINE "PYRO-PAC" SEALS OR EQUAL.
 4. WHERE PIPE EXPOSED AT FINISHED WALL, FLUSH MOUNT SLEEVE, AND PROVIDE AN ESCUTCHEON PLATE.

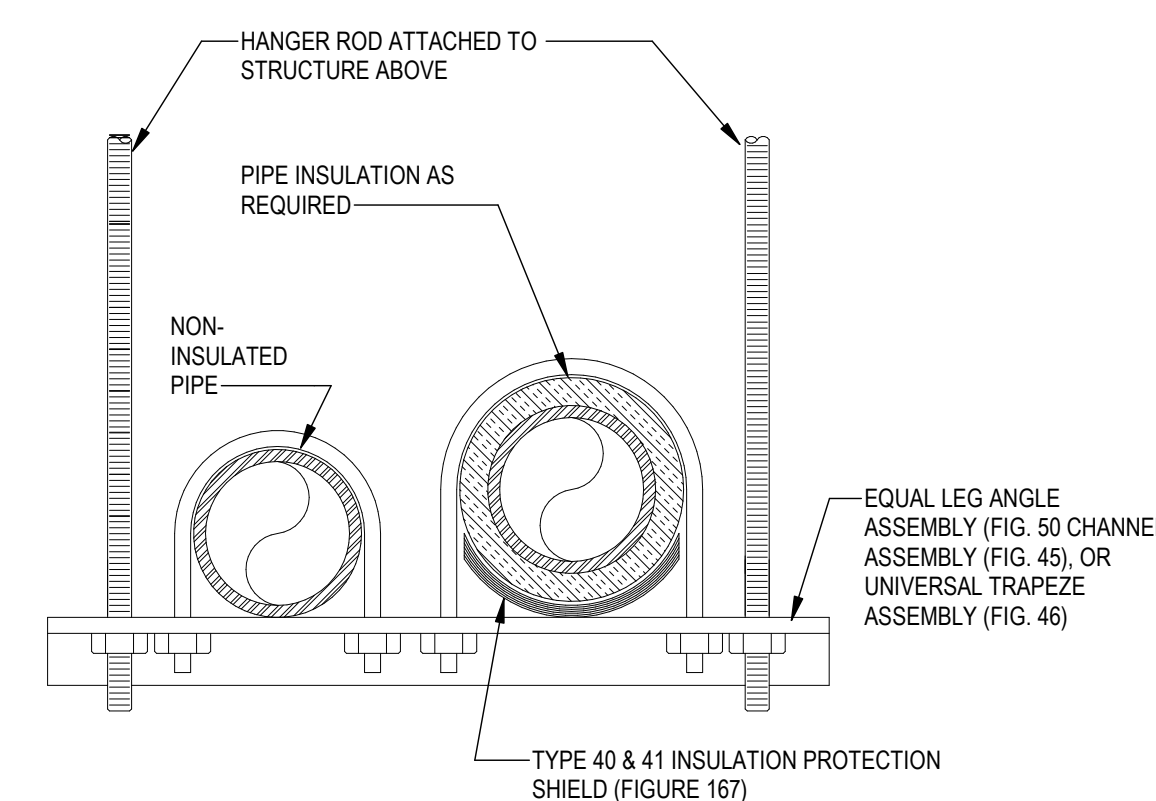
3 PIPE PENETRATION THRU EXTERIOR WALLS
SCALE: 1/8" = 1'-0"



5 DEN 112 SECTION
SCALE: 1/4" = 1'-0"



2 PIPE HANGER, INSULATION AND VAPOR JACKET
SCALE: 1/8" = 1'-0"



- NOTES:
1. SIZE RODS, SPRING CUSHION, AND HORIZONTAL MEMBER APPROVED TO SATISFY LOAD REQUIREMENT WITH SAFETY FACTOR OF 5.
 2. FIGURE NUMBERS ARE TYPICAL TO GRINNELL SUPPORT NUMBERS.

1 TRAPEZE TYPE PIPE SUPPORT
SCALE: 1/8" = 1'-0"